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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/374,280 08/13/99 NAVARRO

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EXAMINER

FARAH, A

ART UNIT

PAPER NUMBER

3739

DATE MAILED: 11/15/00

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
09/374,280

Applicant(s)

Navaro et al.

Examiner

Ahmed Farah

Group Art Unit  
3739



☐ Responsive to communication(s) filed on \_\_\_\_\_

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claim

- ☒ Claim(s) 1-20 is/are pending in the application.
- Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1-9 and 11-19 is/are rejected.
- ☒ Claim(s) 10 and 20 is/are objected to.
- ☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

- ☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some\* ☒ None of the CERTIFIED copies of the priority documents have been
- ☐ received.
- ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

- ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- ☒ Notice of References Cited, PTO-892
- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 4 and 5
- ☐ Interview Summary, PTO-413
- ☒ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-8 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. A single means claim, i.e., where a means recitation does not appear in combination with another recited element of means, is subject to an undue breadth rejection. See MPEP 2164.08(a). A single means claim which covers every conceivable means for achieving the stated purpose is held to be nonenabling for the scope of the claim.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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3. Claims 1-4, 7- 9, 12, 13, 18 and 19 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Trelles U. S. Pat. No. 5,531,739.

Trelles discloses a method and apparatus for treating a blood vessel located beneath the surface of the skin by using a fiber optic probe advanced to a location underneath the vessel to be treated. Further, Trelles teaches that a visible aiming beam can be used to highlight the locating of the vein in order to place the probe at the treatment site. See Trelles Col. 2, lines 63-67.

In reference to claims 1, 2, and 9 of the present application, Trelles teaches that his method includes the steps of: piercing the skin with the tip of the fiber optic probe; advancing the probe laterally beneath the skin so that the delivery end of the probe is adjacent to the vessel to be treated; and irradiating the vessel with a high power treatment laser beam to coagulate the vessel and cause the vessel to collapse. See claim 1 of Trelles.

In regard to claims 3, 4, and 12, Trelles discloses that the treatment energy is transmitted through an optical fiber mounted within the probe, whereby the diameter of said optical fiber is on the order of 200 to 600 microns. See Trelles Col. 2, lines 41- 44.

In reference to claims 7 and 18, Col. 2 lines 11- 16 of Trelles clearly shows a number of laser, capable to provide the wavelength range of the present claim, that may be used for the treatment. And, in reference to claims 8 and 19, Trelles' method employs a pulsed laser which provides the laser energy in bursts. See Trelles Col. 3, lines 1- 4.

4. Claims 1, 4, 9, 11, 17, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Goldman U. S. Pat. No. 4,564,011.

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Goldman discloses laser optic device and method for the treatment of blood vessels and tissue including an elongated fiber optic disposed within a flexible catheter. The catheter is connected at its distal end to a source of laser energy, which includes a focussing lens so that the laser beam it produces is directed into the fiber optic to transmit therealong. In reference to claim 17, Goldman teaches a method for externally applying pressure to vessel prior to applying the laser energy. See claim 5 of Goldman.

*Claim Rejections - 35 USC § 103*

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5, 6, 14-16, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trelles U. S. Pat. No. 5,531,739 in view of Gay, Jr. U. S. Pat. No. 5,334,207.

Trelles has been described above. However, although Trelles employs fiber optic to transmit the treatment light, the emitting section is neither rounded nor located at the tip of said fiber.

Gay, Jr. discloses a laser angioplasty device, having a magnetic steerability and forwarding imaging capability to guide the tip of said device through a blood vessel. Gay's system includes a

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probe, laser source, and a laser fiber which protrudes from the tip of the probe. Fig. 5 of Gay, Jr. clearly shows fiber optic 38 with a rounded tip 66. Therefore, it would have been obvious to one having the ordinary skill in the art at the time of the applicant's invention, to modify Trelles' invention in view of Gay, Jr. to have a rounded light emitting means at the tip of the probe in order to diffuse and direct the light pulses more effectively through the blood vessel. Also, it would have been obvious to place a pad over the puncture site in order to prevent bleeding or infection.

#### *Allowable Subject Matter*

7. Claim 10 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### *Conclusion*

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See the following references:

- |                   |                           |
|-------------------|---------------------------|
| 1. Gregory et al. | U. S. Pat. No. 5,334,207. |
| 2. Leob et al     | U. S. Pat. No. 5,984,915. |

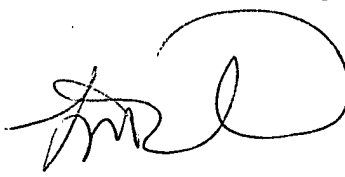
Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Farah whose telephone number is (703)305-5787.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Linda Dvorak, can be reached on (703) 308-0994. The fax number for this Group is (703)305-3590.



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SUPERVISORY PATENT EXAMINER  
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